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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------|-----------------|----------------------|-------------------------|------------------|
| 08/160,965 | 12/02/1993 | JAMES M. MUSSER | 06239007001 | 2506 |
| 26271 | 7590 06/19/2003 | | | |
| FULBRIGHT & JAWORSKI, LLP | | | EXAMINER | |
| 1301 MCKINNEY SUITE 5100 | | | HINES, J. | ANA A |
| HOUSTON, T | X 77010-3095 | | ART UNIT | PAPER NUMBER |
| | | | 1645 | 62 |
| | | • | DATE MAILED: 06/19/2003 | 40 0 |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application N . | Applicant(s) | | | |
|--|--|--|---|--|--|
| Advisory Action | 08/160,965 | MUSSER ET AL. | | | |
| nance, y neuen | Examiner | Art Unit | | | |
| | Ja-Na Hines | 1645 | | | |
| The MAILING DATE of this communication appe | ars on the cover sheet with the c | rrespondence add | ress | | |
| THE REPLY FILED 05 May 2003 FAILS TO PLACE THIS Therefore, further action by the applicant is required to average final rejection under 37 CFR 1.113 may only be either: (1) condition for allowance; (2) a timely filed Notice of Appeal Examination (RCE) in compliance with 37 CFR 1.114. | oid abandonment of this applicated a timely filed amendment which | ation. A proper reply n places the applica | y to a ition in | | |
| PERIOD FOR REPLY [check either a) or b)] | | | | | |
| a) The period for reply expires 4 months from the mailing date b) The period for reply expires on: (1) the mailing date of this A no event, however, will the statutory period for reply expire is ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The fee have been filed is the date for purposes of determining the period of fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the context | Advisory Action, or (2) the date set forth ater than SIX MONTHS from the mailing FILED WITHIN TWO MONTHS OF THE date on which the petition under 37 CFI f extension and the corresponding amothe shortened statutory period for reply the later than three months after the mail | g date of the final rejecting FINAL REJECTION. R 1.136(a) and the apprount of the fee. The appropriginally set in the final | on. See MPEP opriate extension ropriate extension Office action; or | | |
| 1. A Notice of Appeal was filed on Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal. | | | | | |
| 2. The proposed amendment(s) will not be entered be | | | | | |
| (a) they raise new issues that would require further | · | see NOTE below); | | | |
| (b) they raise the issue of new matter (see Note b | | | | | |
| (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or | | | | | |
| (d) they present additional claims without cancelli | ng a corresponding number of fi | nally rejected claim | s. | | |
| NOTE: | | | | | |
| 3. Applicant's reply has overcome the following reject | ion(s): See Continuation Sheet. | | | | |
| 4. Newly proposed or amended claim(s) would canceling the non-allowable claim(s). | be allowable if submitted in a se | eparate, timely filed | amendment | | |
| 5.⊠ The a) affidavit, b) exhibit, or c) request for application in condition for allowance because: See | | dered but does NO | T place the | | |
| 6. The affidavit or exhibit will NOT be considered becaraised by the Examiner in the final rejection. | ause it is not directed SOLELY to | o issues which were | e newly | | |
| 7. For purposes of Appeal, the proposed amendments explanation of how the new or amended claims we | | | and an | | |
| The status of the claim(s) is (or will be) as follows: | | | | | |
| Claim(s) allowed: None. | | | | | |
| Claim(s) objected to: None. | | | | | |
| Claim(s) rejected: <u>1,4-35,46 and 47</u> . | | | | | |
| Claim(s) withdrawn from consideration: | | | | | |
| 8. The proposed drawing correction filed on is | a)□ approved or b)□ disapp | roved by the Exami | ner. | | |
| 9. Note the attached Information Disclosure Statemen | it(s)(PTO-1449) Paper No(s) | · | | | |
| 10. Other: | | | | | |
| | | | | | |
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Continuation of 3. Applicant's reply has overcome the following rejection(s): The rejection of claims 1, 4-35 and 45-47 under 35 U.S.C. 112, second paragraph.

Continuation of 5. does NOT place the application in condition for allowance because: The written description rejection of claims 1, 4-35, 44 and 46-47 under 35 U.S.C. 112, first paragraph, is maintained for reasons already of record.

The amended claims are now drawn to an immunogenic composition and method of producing an immune response comprising a cysteine protease comprising at least one amino acid substitution and said substitution occurs at specific positions, however, the claims and specification appear to fail to recite the reference sequence from which the amino acid substitutions are drawn.

Applicants assert that at least 33 of the 39 identified alleles differ in sequence but that sequences for SpeB were known at the time of applicants invention. However the claims still fail to recite the base sequence that is being mutated. Without knowing the reference sequence, one cannot really know the significance of substituting lys145 or the like.

Adequate written description requires more than a mere statement that it is part of the invention and a reference to a potential method of using but rather the reference sequence is required in order that one in the art known exactly which amino acids are being mutated. Thus a precise description of the reference sequence is necessary. Thus the specification is insufficient to support the instant claims. In view of these considerations, a person skilled in the art would not have viewed the teachings of the specification sufficient to show that applicants were in possession of a immunogenic composition comprising the mutated cysteine protease and method of producing an immune response as asserted in the specification as instantly claimed.

LYNETTE R. F. SMITH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600